

# Hanna Sophia

## List of Publications by Year in descending order

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79

papers

1,852

citations

186265

28

h-index

289244

40

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81

all docs

81

docs citations

81

times ranked

2165

citing authors

#	ARTICLE	IF	CITATIONS
1	Highly efficient photoelectrochemical and photocatalytic anodic TiO <sub>2</sub> nanotube layers with additional TiO <sub>2</sub> coating. <i>Applied Materials Today</i> , 2017, 9, 104-110.	4.3	83
2	Influence of annealing temperatures on the properties of low aspect-ratio TiO <sub>2</sub> nanotube layers. <i>Electrochimica Acta</i> , 2016, 213, 452-459.	5.2	79
3	One-dimensional anodic TiO <sub>2</sub> nanotubes coated by atomic layer deposition: Towards advanced applications. <i>Applied Materials Today</i> , 2019, 14, 1-20.	4.3	78
4	Atomic Layer Deposition for Coating of High Aspect Ratio TiO <sub>2</sub> Nanotube Layers. <i>Langmuir</i> , 2016, 32, 10551-10558.	3.5	74
5	Effect of electrolyte age and potential changes on the morphology of TiO <sub>2</sub> nanotubes. <i>Journal of Electroanalytical Chemistry</i> , 2015, 759, 122-128.	3.8	67
6	One-Step Decoration of TiO <sub>2</sub> Nanotubes with Fe <sub>3</sub> O <sub>4</sub> Nanoparticles: Synthesis and Photocatalytic and Magnetic Properties. <i>ACS Applied Nano Materials</i> , 2020, 3, 1553-1563.	5.0	63
7	ALD Al <sub>2</sub> O <sub>3</sub> -Coated TiO <sub>2</sub> Nanotube Layers as Anodes for Lithium-Ion Batteries. <i>ACS Omega</i> , 2017, 2, 2749-2756.	3.5	60
8	ZnO Coated Anodic 1D TiO <sub>2</sub> Nanotube Layers: Efficient Photo-Electrochemical and Gas Sensing Heterojunction. <i>Advanced Engineering Materials</i> , 2018, 20, 1700589.	3.5	48
9	Anodic TiO <sub>2</sub> nanotubes decorated by Pt nanoparticles using ALD: An efficient electrocatalyst for methanol oxidation. <i>Journal of Catalysis</i> , 2018, 365, 86-93.	6.2	45
10	Electrochemical Infilling of CuInSe <sub>2</sub> within TiO <sub>2</sub> Nanotube Layers and Subsequent Photoelectrochemical Studies. <i>ChemElectroChem</i> , 2017, 4, 495-499.	3.4	44
11	Atomic Layer Deposition Al <sub>2</sub> O <sub>3</sub> Coatings Significantly Improve Thermal, Chemical, and Mechanical Stability of Anodic TiO <sub>2</sub> Nanotube Layers. <i>Langmuir</i> , 2017, 33, 3208-3216.	3.5	44
12	A New Type of Bismuth Electrode for Electrochemical Stripping Analysis Based on the Ammonium Tetrafluorobismuthate Bulk-Modified Carbon Paste. <i>Electroanalysis</i> , 2010, 22, 1489-1493.	2.9	41
13	Enzyme-Photocatalyst Tandem Microrobot Powered by Urea for <i>Escherichia coli</i> Biofilm Eradication. <i>Small</i> , 2022, 18, e2106612.	10.0	41
14	Insights into the simultaneous chronopotentiometric stripping measurement of indium(III), thallium(I) and zinc(II) in acidic medium at the <i>in situ</i> prepared antimony film carbon paste electrode. <i>Electrochimica Acta</i> , 2010, 55, 7929-7933.	5.2	40
15	Self-organized Anodic TiO <sub>2</sub> Nanotube Layers: Influence of the Ti substrate on Nanotube Growth and Dimensions. <i>Electrochimica Acta</i> , 2016, 190, 744-752.	5.2	40
16	A 1D conical nanotubular TiO <sub>2</sub> /CdS heterostructure with superior photon-to-electron conversion. <i>Nanoscale</i> , 2018, 10, 16601-16612.	5.6	39
17	Bismuth film electrode for stripping voltammetric measurement of sildenafil citrate. <i>Electrochimica Acta</i> , 2012, 60, 274-277.	5.2	38
18	CdS-coated TiO <sub>2</sub> nanotube layers: downscaling tube diameter towards efficient heterostructured photoelectrochemical conversion. <i>Nanoscale</i> , 2017, 9, 7755-7759.	5.6	38

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19	Ti <sup>3+</sup> doped anodic single-wall TiO <sub>2</sub> nanotubes as highly efficient photocatalyst. <i>Electrochimica Acta</i> , 2020, 331, 135374.	5.2	38
20	Scaling up anodic TiO <sub>2</sub> nanotube layers for gas phase photocatalysis. <i>Electrochemistry Communications</i> , 2018, 97, 91-95.	4.7	37
21	In-situ plated antimony film electrode for adsorptive cathodic stripping voltammetric measurement of trace nickel. <i>Electrochemistry Communications</i> , 2012, 20, 23-25.	4.7	36
22	Influence of the Ti microstructure on anodic self-organized TiO <sub>2</sub> nanotube layers produced in ethylene glycol electrolytes. <i>Applied Surface Science</i> , 2016, 371, 607-612.	6.1	36
23	Anodic TiO <sub>2</sub> Nanotubes on 3D-Printed Titanium Meshes for Photocatalytic Applications. <i>Nano Letters</i> , 2021, 21, 8701-8706.	9.1	36
24	Comparison of photoelectrochemical performance of anodic single- and double-walled TiO <sub>2</sub> nanotube layers. <i>Electrochemistry Communications</i> , 2018, 97, 1-5.	4.7	34
25	2D MoS <sub>2</sub> nanosheets on 1D anodic TiO <sub>2</sub> nanotube layers: an efficient co-catalyst for liquid and gas phase photocatalysis. <i>Nanoscale</i> , 2019, 11, 23126-23131.	5.6	34
26	High aspect ratio TiO <sub>2</sub> nanotube layers obtained in a very short anodization time. <i>Electrochimica Acta</i> , 2021, 376, 138080.	5.2	34
27	Intrinsic properties of high-aspect ratio single- and double-wall anodic TiO <sub>2</sub> nanotube layers annealed at different temperatures. <i>Electrochimica Acta</i> , 2020, 352, 136479.	5.2	34
28	TiO <sub>2</sub> nanotubes grown on Ti substrates with different microstructure. <i>Materials Research Bulletin</i> , 2018, 103, 197-204.	5.2	29
29	Atomic Layer Deposition of SnO <sub>2</sub> -Coated Anodic One-Dimensional TiO <sub>2</sub> Nanotube Layers for Low Concentration NO <sub>2</sub> Sensing. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 33386-33396.	8.0	28
30	Self-organized TiO <sub>2</sub> nanotubes grown on Ti substrates with different crystallographic preferential orientations: Local structure of TiO <sub>2</sub> nanotubes vs. photo-electrochemical response. <i>Electrochimica Acta</i> , 2018, 264, 393-399.	5.2	27
31	Thin TiO <sub>2</sub> Coatings by ALD Enhance the Cell Growth on TiO <sub>2</sub> Nanotubular and Flat Substrates. <i>ACS Applied Bio Materials</i> , 2020, 3, 6447-6456.	4.6	27
32	Fabrication of TiO <sub>2</sub> nanotubes on Ti spheres using bipolar electrochemistry. <i>Electrochemistry Communications</i> , 2020, 111, 106669.	4.7	26
33	Macroporous Bismuth Film Screen-Printed Carbon Electrode for Simultaneous Determination of Ni(II) and Co(II). <i>Electroanalysis</i> , 2015, 27, 209-216.	2.9	25
34	New Interface for Purification of Proteins: One-Dimensional TiO <sub>2</sub> Nanotubes Decorated by Fe <sub>3</sub> O <sub>4</sub> Nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 28233-28242.	8.0	25
35	Atomic Layer Deposition of MoSe <sub>2</sub> Nanosheets on TiO <sub>2</sub> Nanotube Arrays for Photocatalytic Dye Degradation and Electrocatalytic Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2020, 3, 12034-12045.	5.0	25
36	Laser-induced crystallization of anodic TiO <sub>2</sub> nanotube layers. <i>RSC Advances</i> , 2020, 10, 22137-22145.	3.6	23

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37	TiO <sub>2</sub> Nanotube/Chalcogenide-Based Photoelectrochemical Cell: Nanotube Diameter Dependence Study. <i>Journal of Physical Chemistry C</i> , 2017, 121, 6065-6071.	3.1	22
38	ALD growth of MoS <sub>2</sub> nanosheets on TiO <sub>2</sub> nanotube supports. <i>FlatChem</i> , 2019, 17, 100130.	5.6	22
39	Complex cytotoxicity mechanism of bundles formed from self-organised 1-D anodic TiO <sub>2</sub> nanotubes layers. <i>Journal of Hazardous Materials</i> , 2020, 388, 122054.	12.4	22
40	Charge transport in anodic TiO <sub>2</sub> nanotubes studied by terahertz spectroscopy. <i>Physica Status Solidi - Rapid Research Letters</i> , 2016, 10, 691-695.	2.4	21
41	Anodic TiO <sub>2</sub> nanotube walls reconstructed: Inner wall replaced by ALD TiO <sub>2</sub> coating. <i>Applied Surface Science</i> , 2021, 549, 149306.	6.1	20
42	Anodization of electrodeposited titanium films towards TiO <sub>2</sub> nanotube layers. <i>Electrochemistry Communications</i> , 2020, 118, 106788.	4.7	19
43	Pt nanoparticles decorated TiO <sub>2</sub> nanotubes for the reduction of olefins. <i>Applied Materials Today</i> , 2018, 10, 86-92.	4.3	18
44	TiO <sub>2</sub> ALD Coating of Amorphous TiO <sub>2</sub> Nanotube Layers: Inhibition of the Structural and Morphological Changes Due to Water Annealing. <i>Frontiers in Chemistry</i> , 2019, 7, 38.	3.6	17
45	MoSe <sub>x</sub> O <sub>y</sub> Coated 1D TiO <sub>2</sub> Nanotube Layers: Efficient Interface for Light-Driven Applications. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701146.	3.7	16
46	Wireless Electrosampling of Heavy Metals for Stripping Analysis with Bismuth-Based Janus Particles. <i>Analytical Chemistry</i> , 2014, 86, 10515-10519.	6.5	15
47	Cathodic adsorptive stripping voltammetric detection of tRNA by labelling with osmium tetroxide. <i>Electrochemistry Communications</i> , 2008, 10, 1614-1616.	4.7	13
48	Antireflection In <sub>2</sub> O <sub>3</sub> coatings of self-organized TiO <sub>2</sub> nanotube layers prepared by atomic layer deposition. <i>Physica Status Solidi - Rapid Research Letters</i> , 2015, 9, 516-520.	2.4	13
49	Amorphous TiO <sub>2</sub> Nanotubes as a Platform for Highly Selective Phosphopeptide Enrichment. <i>ACS Omega</i> , 2019, 4, 12156-12166.	3.5	13
50	2D MoTe <sub>2</sub> nanosheets by atomic layer deposition: Excellent photo- electrocatalytic properties. <i>Applied Materials Today</i> , 2021, 23, 101017.	4.3	12
51	Ideally Hexagonally Ordered TiO <sub>2</sub> Nanotube Arrays. <i>ChemistryOpen</i> , 2017, 6, 480-483.	1.9	10
52	Sulfur treated 1D anodic TiO <sub>2</sub> nanotube layers for significant photo- and electroactivity enhancement. <i>Applied Materials Today</i> , 2019, 17, 104-111.	4.3	10
53	Self-supported sulphurized TiO <sub>2</sub> nanotube layers as positive electrodes for lithium microbatteries. <i>Applied Materials Today</i> , 2019, 16, 257-264.	4.3	10
54	Self-organized double-wall oxide nanotube layers on glass-forming Ti-Zr-Si(-Nb) alloys. <i>Materials Science and Engineering C</i> , 2017, 70, 258-263.	7.3	9

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55	TiO <sub>2</sub> Nanotube Layers Decorated with Al <sub>2</sub> O <sub>3</sub> /MoS <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> as Anode for Li-ion Microbatteries with Enhanced Cycling Stability. <i>Nanomaterials</i> , 2020, 10, 953.	4.1	9
56	TiO <sub>2</sub> nanotube layers decorated by titania nanoparticles as anodes for Li-ion microbatteries. <i>Materials Chemistry and Physics</i> , 2022, 276, 125337.	4.0	9
57	Preparation of porcupine-like Bi <sub>2</sub> O <sub>3</sub> needle bundles by anodic oxidation of bismuth. <i>Electrochemistry Communications</i> , 2017, 84, 6-9.	4.7	7
58	Bismuth Oxychloride Nanoplatelets by Breakdown Anodization. <i>ChemElectroChem</i> , 2019, 6, 336-341.	3.4	6
59	Recent advancements in the synthesis, properties, and applications of anodic self-organized TiO <sub>2</sub> nanotube layers. , 2020, , 173-209.		6
60	Scaling up anodic TiO <sub>2</sub> nanotube layers – Influence of the nanotube layer thickness on the photocatalytic degradation of hexane and benzene. <i>Applied Materials Today</i> , 2022, 29, 101567.	4.3	6
61	Wireless Anodization of Ti in Closed Bipolar Cells. <i>ChemElectroChem</i> , 2021, 8, 3827-3831.	3.4	4
62	Photoconductive, dielectric and percolation properties of anodic TiO <sub>2</sub> nanotubes studied by terahertz spectroscopy. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 014004.	2.8	3
63	High-Aspect-Ratio TiO <sub>2</sub> Nanotube Layers via Galvanostatic Anodization in an Electrolyte Containing Lactic Acid. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100146.	2.4	3
64	Molybdenum Disulfides and Diselenides By Atomic Layer Deposition. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 837-837.	0.0	1
65	Laser Annealing of Anodic TiO <sub>2</sub> Nanotubes: Explosive Solid Phase Crystallization into Anatase. , 2021, , .		0
66	(Invited) Anodic TiO <sub>2</sub> Nanotube Layers: Efficient Photocatalyst. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 1928-1928.	0.0	0
67	High Aspect Ratio TiO <sub>2</sub> Nanotube Layers Obtained in a Short Time. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 791-791.	0.0	0
68	Secondary Material Modified Anodic TiO <sub>2</sub> Nanotube Layers As Efficient Gas Sensors. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 1483-1483.	0.0	0
69	Anodic TiO <sub>2</sub> Nanotube Layers As Scaffolds for Deposition of Functional Materials. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 926-926.	0.0	0
70	Anodic TiO <sub>2</sub> Nanotube Layers As Scaffolds for Deposition of Functional Materials. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 1202-1202.	0.0	0
71	New Protocols for the Synthesis of Anodic TiO <sub>2</sub> Nanotube Layers. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 601-601.	0.0	0
72	Anodic TiO <sub>2</sub> Nanotube Layers: Efficient Photocatalyst. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1439-1439.	0.0	0

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73	Anodic TiO <sub>2</sub> Nanotube Layers: Efficient Photocatalyst. ECS Meeting Abstracts, 2020, MA2020-02, 3061-3061.	0.0	0
74	Recent Progress in Anodic TiO <sub>2</sub> Nanotube Layer Synthesis. ECS Meeting Abstracts, 2020, MA2020-02, 1200-1200.	0.0	0
75	Atomic Layer Deposition for Modification of Various 1D Nanomaterials. ECS Meeting Abstracts, 2021, MA2021-02, 905-905.	0.0	0
76	2D Molybdenum Dichalcogenides by Atomic Layer Deposition. ECS Meeting Abstracts, 2021, MA2021-02, 903-903.	0.0	0
77	Bipolar Electrochemistry for the Synthesis of Anodic TiO <sub>2</sub> Nanotube Layers. ECS Meeting Abstracts, 2022, MA2022-01, 1978-1978.	0.0	0
78	Large-Scale Synthesis of Photocatalytic TiO <sub>2</sub> Nanotube Layers. ECS Meeting Abstracts, 2022, MA2022-01, 1587-1587.	0.0	0
79	Recent Advancements in Morphologies of TiO <sub>2</sub> Nanotube Layers and Their Photocatalytic Performance. ECS Meeting Abstracts, 2022, MA2022-01, 1586-1586.	0.0	0